## **Product** Data Sheet

# **N-Acetylserine**

Cat. No.: HY-134222A CAS No.: 16354-58-8 Molecular Formula:  $C_5H_9NO_4$  Molecular Weight: 147.13

Target: Endogenous Metabolite

Pathway: Metabolic Enzyme/Protease

Storage: -20°C, stored under nitrogen

\* In solvent: -80°C, 6 months; -20°C, 1 month (stored under nitrogen)

### **SOLVENT & SOLUBILITY**

In Vitro

 $H_2O: 125 \text{ mg/mL}$  (849.59 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	6.7967 mL	33.9836 mL	67.9671 mL
	5 mM	1.3593 mL	6.7967 mL	13.5934 mL
	10 mM	0.6797 mL	3.3984 mL	6.7967 mL

Please refer to the solubility information to select the appropriate solvent.

### **BIOLOGICAL ACTIVITY**

Description	N-Acetylserine (N-Acetyl-L-serine) can bind to CysB apoprotein. N-acetylserine is the physiological inducer of cysteine biosynthesis. N-Acetylserine can stimulate in vitro cysJIH transcription <sup>[1][2]</sup> .
IC <sub>50</sub> & Target	Human Endogenous Metabolite

#### **REFERENCES**

[1]. Lynch AS, et al. Characterization of the CysB protein of Klebsiella aerogenes: direct evidence that N-acetylserine rather than O-acetylserine serves as the inducer of the cysteine regulon. Biochem J. 1994 Apr 1;299 (Pt 1)(Pt 1):129-36.

[2]. Ostrowski J, et al. Molecular characterization of the cysJIH promoters of Salmonella typhimurium and Escherichia coli: regulation by cysB protein and N-acetyl-L-serine. J Bacteriol. 1989 Jan;171(1):130-40.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$ 

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